

Great Lakes & Ohio River Division Regional Technical Specialist

Virgil L. Langdon Jr.
Economics - Navigation

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QUALIFICATIONS

Education

B.B.A. Economics
Marshall University, 1982

M.S. Agricultural and Applied
Economics
Virginia Polytechnic Institute and
State University 1998

Professional Registration

None

Professional Association Memberships

None



EXPERTISE

Mr. Langdon's has been involved in shallow and deep draft transportation studies utilizing probabilistic simulation models, lock performance simulation models, equilibrium models, operations research analysis methods, statistical techniques and navigation data bases to estimate National Economic Development benefits. Specializing in navigation-related economic model development to quantify non-traditional benefits and the probabilistic nature of reliability and uncertainty of input assumptions and its effect on benefit/cost calculations.

REPRESENTATIVE EXPERIENCE

October 1982 to November 2004, Regional Economist – Navigation Planning Center, U.S. Army Corps of Engineers - Huntington District.

Involved in shallow and deep draft transportation studies utilizing probabilistic simulation models, lock performance simulation models, equilibrium models, operations research analysis methods, statistical techniques and navigation data bases in accordance with ER 1105-2-100 to estimate National Economic Development benefits. Specialist in navigation-related economic model development to quantify traditional and non-traditional benefits and the probabilistic nature of reliability and uncertainty of input assumptions and its effect on benefit/cost calculations. FORTRAN and UNIX programming skills. Use MS EXCEL, MS EXCEL SOLVER, MS Visual Basic, MS ACCESS, Palisade @RISK, WAM, TCMEQ, and ORNIM software to automate data management, analyze data and to model and analyze transportation systems. Use MS Word and MS PowerPoint software for analysis briefings and technical documentation.

Did capacity, benefit-cost and risk analysis for Marmet and London Locks and Dam studies. Documented and supported analysis through HQUSACE. Did benefit-cost analysis, SOW, resolved HQUSACE technical comments and managed Navigation Planning Center budget for Sault Ste. Marie Replacement Lock Final LRR. Developed the analysis methods for the Chickamauga Lock Replacement Study, including the creation and oversight of economic models and supervision of WAM modifications. Documented Chickamauga Capacity, ChickWAM and SET Model attachments. Participated on the USACE Panama Canal Maintenance Study Team. Team member of the ORMSS Myers / Greenup Interim Feasibility Report. Assisted with the economic cost-benefit analysis on Lower Monongahela River Study, estimated construction delay costs for Winfield and Gallipolis, calibrated Tow Cost Model, and conducted data analysis on WCSC and LPMS databases. Assisted in the Kanawha River Reconnaissance Report, the Big Sandy River Study and conducted data analysis on WCSC and LPMS databases. Assisted in Gallipolis Locks and Dam replacement study and conducted data analysis on WCSC and LPMS databases.

Currently assisting with design and development of the Ohio River Navigation Investment Model. Participating on the Ohio River Main Stem System Study. Participating on the Great Lakes and St. Lawrence Seaway study.

Various presentations: trained Planners and Project Managers on inland-navigation NED benefit estimation; taught modules of HQ Formulation class (2002); assisted in briefing of LRD modeling techniques at 1999 Economic Analysis Conference; and presented at 2003 TRB Annual Conference.